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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/098,534	03/18/2002	Takeo Tanaami	020349	6234
23850	7590	10/01/2003	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			EVANS, FANNIE L	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/098,534	TANAAMI ET AL.	
	Examiner	Art Unit	
	F. L. Evans	2877	

-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 8, 9 and 12-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>0702</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

The Preliminary Amendment

The preliminary amendment filed on March 18, 2002 has been entered.

Election/Restrictions

Applicant's election without traverse of the invention of Group I (claims 1-7, 10 and 11) on August 26, 2003 is acknowledged.

Claims 8, 9 and 12-16 are withdrawn from further consideration pursuant to 37 CFR § 1.142(b) as being drawn to nonelected inventions.

Claim Rejections - 35 USC § 112

Claims 4-7, 10 and 11 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The lack of an antecedent for "the image-forming lens" in line 2 of claim 4 and line 8 of claim 10; "the light source in Koehler's illumination" bridging lines 2 and 3 of claim 5; and "the image-forming lens" in line 5 of claim 7 renders these claims and any claim dependent therefrom indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the prior art in applicant's Fig. 3 in view of Hell et al (US 6,262,423 B1).

The prior art biochip reader in applicant's Fig. 3 comprises a plate on which a plurality of microlenses (21) is arranged, and a two-dimensional detector (26) that detects a fluorescence image of a biochip. The plate containing the microlenses does not rotate.

Hell et al disclose a scanning microscope capable of reading a biochip. In the embodiment of Fig. 11, a rotation plate with a plurality of microlenses is used to irradiate a sample. Applicant's attention is directed to Fig. 11 and the text pertaining thereto in the paragraph bridging columns 6 and 7.

At the time the invention was made, it would have been obvious to one with ordinary skill in the art to use a rotating plate with microlenses rather than a stationary plate in the prior art biochip reader of Fig. 3 if it was desired to scan the sample (biochip) in two or three dimensions.

Claims 3, 4 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the prior art in applicant's Fig. 3 in view of Ramm et al (US 6,345,115 B1).

The prior art biochip reader in applicant's Fig. 3 comprises a barrier filter (24) which acts to transmit fluorescence from a sample surface but to attenuate excitation light reflected from the sample surface. The incident angle of the reflected excitation light on the barrier filter is not specified.

Ramm et al disclose an imaging system capable of reading microchips. The imaging system comprises a barrier filter. See the paragraph bridging columns 13 and 14. In lines 2-7 of column 14, Ramm et al teach that the light incident on the barriers filter is 0 degrees.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to arrange the barrier filter of the prior art biochip reader of Fig. 3 at 0 degrees with respect to the incident light because of the teaching in lines 4-7 of column 14 of Ramm et al.

Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the prior art in applicant's Fig. 3 in view of Hell et al (US 6,262,423 B1), as applied to claims 1 and 2 above, and further in view of Ramm et al (US 6,345,115 B1).

The above proposed biochip reader comprises a barrier filter (24) which acts to transmit fluorescence from a sample surface but to attenuate excitation light reflected from the sample surface. The incident angle of the reflected excitation light on the barrier filter is not specified.

Ramm et al disclose an imaging system capable of reading microchips. The imaging system comprises a barrier filter. See the paragraph bridging columns 13 and 14. In lines 2-7 of column 14, Ramm et al teach that the light incident on the barriers filter is 0 degrees.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to arrange the barrier filter of the above proposed biochip reader of Fig. 3 at 0 degrees with respect to the incident light because of the teaching in lines 4-7 of column 14 of Ramm et al.

The Information Disclosure Statement

The prior art cited in the information disclosure statement filed on July 24, 2002 has been considered.

Additional Prior Art

Uetake (US 3,973,827) disclose an interfering filter formed on a convex lens. See lines 44-55 in column 5 of Uetake.

Art Unit: 2877

Fax/Telephone Numbers

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The fax number for Technology Center 2800 is (703) 872-9306 for regular and After Final communications.


If applicant wishes to send a fax containing a Proposed Amendment for discussion during either a personal interview or a telephone interview then the fax should:

- 1) Contain either the statement "**DRAFT**" or "**PROPOSED AMENDMENT**" on the Fax Cover Sheet; and
- 2) Should be unsigned by the attorney or agent.

This will ensure that the amendment will not be entered into the application and will be forwarded to the examiner as quickly as possible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner whose telephone number is (703) 308-4805. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font, can be reached on (703) 308-4881. The TC Receptionist's telephone number is (703) 308-0956.

Any other inquiry of a technical nature, and all inquiries of a general nature including those relating to the status of an application should be directed to TC 2800 Customer Service Office whose telephone number is (703) 306-3329.


F. L. EVANS
PRIMARY EXAMINER
ART UNIT 2877

flc

September 20, 2003